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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,649	09/21/2001	Vivian Pecos	4940/1M	5265
33690	7590	05/16/2006	EXAMINER	
DAVID LOEWENSTEIN			CHANKONG, DOHM	
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RYE BROOK, NY 10573			ART UNIT	PAPER NUMBER
			2152	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,649

Applicant(s)

PECUS ET AL.

Examiner

Dohm Chankong

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2152

DETAILED ACTION

1> This action is in response to Applicant's amendment and remarks, filed 2.27.2006.

Claims 1 and 4 have been amended. Claims 13-16 have been added. Claims 1-16 are now presented for further examination.

2> This is a non-final rejection.

Oath/Declaration

3> Applicant's declaration, filed 2.27.2006 has been received, claiming priority date before 12.14.2000. As such, the Headings reference is no longer prior art and all related rejections are withdrawn.

Response to Arguments

4> With respect to the rejection of claims 4, 6, 8, 10 and 12, under Lahr, Applicant's arguments have been fully considered but they are not persuasive. Lahr's media serving system corresponds to Applicant's claimed edge node. Applicant's sole argument is that Lahr fails to disclose accommodating the variety of computing elements in a single computer.

However, contrary to this assertion, Lahr's media serving system may be implemented as a single computer that contains each element of claimed edge node. Lahr discloses that the media serving system processes both live and non-live content, receives information from a satellite through a satellite interface, is connected to a wire network interface for transmitting the content [0027]. Applicant's contention implies that Lahr's

Art Unit: 2152

media serving system is not a single computer. This is erroneous interpretation of Lahr's invention. As shown in Lahr's Figure 3, the media serving system is a single computing element with all the various functionalities housed within.

Thus, Applicant's argument is not persuasive and the rejections of claims 4, 6, 8, 10 and 12 are maintained.

5> Applicant's arguments with respect to claims 1-3, 5, 7, 9 and 11 are moot in light of the new grounds of rejection set forth below.

Double Patenting

6> The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 2152

Claims 1-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-II of copending Application No. 09/960,843. Although the conflicting claims are not identical, they are not patentably distinct from each other. For instance, the only difference between claim 1 of the instant application and claim 1 of the copending application is that the copending application claims one or more media servers whereas the instant application claims one media server. Such a difference is obvious and does not render the claims patentably distinct from one another.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2152

7> Claims 4, 6, 8, 10, 12 and 15-16 are rejected under 35 U.S.C § 102(e) as being anticipated by Lahr, U.S Patent Publication No. 2001|0029525 ["Lahr"].

8> As to claim 4, Lahr discloses an edge node that receives content from a Network Operations Center (NOC) via a satellite content distribution network and distributes it to a last mile service provider, the edge node comprising:

a processor that executes for serving both live and non-live content [Figure 8 | 0027];

a satellite interface, connected to the processor, that receives content from the satellite link [Figure 2 | Figure 4 | 0020, 0023];

a wire network interface, connected to the processor, for transmitting content to the last mile service provider [Figure 2 | 0020, 0023].

where the processor, satellite interface, and wire network interface exist in a single personal computer [Figure 3 | 0020, 0023 : the edge device connected to both the satellite interface and wire network such as the Internet].

9> As to claim 6, Lahr discloses a terrestrial link provides a back channel to the NOC [0044].

10> As to claim 8, Lahr discloses content that is streamed [Figure 8 | 0041].

11> As to claim 10, Lahr discloses one or more additional media servers capable of serving both live and non-live content [Figure 8 | 0032, 0041].

12> As to claim 12, Lahr discloses shared storage connected to the satellite interface and the processor [Figure 3 | Figure 8 | 0020, 0023].

13> As to claim 15, Lahr discloses the processor serving received content in response to a user request directed to the edge node by an Internet Redirection Engine [0006 : “redirect the client to a server that can service the request”].

14> As to claim 16, Lahr discloses the IRE located at the NOC [0017, 0024].

15> Claims 4, 6, 8 and 12 are rejected under 35 U.S.C § 102(e) as being anticipated by Rajakarunanayake et al, U.S Patent No. 6.810.413 [“Rajakarunanayake”].

16> As to claim 4, Rajakarunanayake discloses an edge node that receives content from a Network Operations Center via a satellite broadcast content distribution network and distributes it to a last mile service provider, the edge node comprising:

a processor that executes for serving both live and non-live content [column 7 «lines 29-33»];

a satellite interface, connected to the processor, that receives content from the satellite broadcast content distribution network [Figure 3 «item 218, 220, 222»];

a wire network interface, connected to the processor, for transmitting content to the last mile service provider and having a terrestrial communication link to the NOC [Figure 3

Art Unit: 2152

«items 210, 204, 226, 230, 232, 244» | column 7 «lines 3-8» | column 9 «lines 1-4» | column 10 «lines 52-62»];

where the processor, satellite interface and wire network interface exist in a single personal computer [Figure 3 «item 220» : where the regional data center is implemented as a single computing entity].

17> As to claim 6, Rajakarunanayake discloses a terrestrial link providing a back channel to the NOC [Figure 3 «item 204»].

18> As to claim 8, Rajakarunanayake discloses streamed content [column 9 «lines 12-16»].

19> As to claim 12, Rajakarunanayake discloses shared storage connected to the satellite interface and the processor [column 7 «lines 9-33»].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2152

20> Claims 1, 5, 7, 9, 11 and 13-14 are rejected under 35 U.S.C § 103(a) as being unpatentable over Lahr in view of Seiler et al, U.S Patent Publication No. 2003|0009437 ["Seiler"].

21> As to claim 1, Lahr discloses an edge node that receives content from a Network Operations Center (NOC) via a satellite content distribution network and distributes it to a last mile service provider, the edge node comprising:

- one media server capable of serving both live and non-live content [Figure 8 | 0041];
- a Local Area Network (LAN) that receives content from the satellite link and distributes it to the media server [0020 : "private network"];
- a LAN that transmits the received content from the server to a last mile service provider [0020, 0022]; and

where the media server is connected to both the LANs [Figure 8 | 0020, 0041, 0042].

Lahr does not explicitly disclose that the a private VLAN, a public VLAN, or that the media server, private VLAN, and public VLAN exist in a single computer. However, Lahr seems to suggest such functionality. He describes a media delivery system contains the functionality of the VLANs and the media servers and that the media servers is connected to the private and public VLAN [see Figure 3 Figure 8, Figure 9]. Thus it would have been obvious to one of ordinary skill in the art to have incorporated the media server and VLAN elements into a single computer, such as his endpoint server.

22> Seiler discloses a server, analogous to Lahr's media serving system, comprising of a private VLAN and a public VLAN [0238 : public and private VLAN in a single computer].

Art Unit: 2152

The purpose of the private VLAN is to insure a secure and protected network for receiving data from a source [0238].

Thus, it would have been obvious to one of ordinary skill in the art to incorporate Seiler's public and private VLANs into Lahr's media serving system. Such a combination is desirable because the private VLAN would provide Lahr's system a secure means for management and administration workstations to access the content and protecting the content from end-users.

23> As to claim 5, Lahr discloses a terrestrial link provides a back channel to the NOC [0044].

24> As to claim 7, Lahr discloses content that is streamed [Figure 8 | 0041].

25> As to claim 9, Lahr discloses one or more additional media servers capable of serving both live and non-live content [Figure 8 | 0032, 0041].

26> As to claim 11, Lahr discloses shared storage connected to the satellite interface and the processor [Figure 3 | Figure 8 | 0020, 0023].

27> As to claim 13, Lahr discloses the processor serving received content in response to a user request directed to the edge node by an Internet Redirection Engine [0006 : "redirect the client to a server that can service the request"].

28> As to claim 14, Lahr discloses the IRE located at the NOC [0017, 0024].

29> Claims 2 and 3 are rejected under 35 U.S.C § 103(a) as being unpatentable over Lahr, in view of Taylor et al, US Patent Publication No. 2002|0065919 ["Taylor"].

30> As to claims 2 and 3, Lahr does expressly disclose a VPN.

31> Taylor discloses a VPN connecting the public VLAN to a private VLAN, the VPN allowing access to the private VLAN from a remote location [Figure 5 | 0047, 0056, 0138]. It would have been obvious to incorporate Taylor's teachings of VPNs into Lahr's content distribution system; to modify Lahr such that a VPN connects the public and private VLAN. VPNs are well known and ubiquitous in the art for providing a level of security communicating in networks. Such a feature is thus desirable and useful in Lahr's system.

32> Claims 1, 5, 7, and 11 are rejected under 35 U.S.C § 103(a) as being unpatentable over Rajakarunanayake, in view of Sistanizadeh et al, U.S Patent No. 6,681,232 ["Sistanizadeh"].

33> As to claim 1, Rajakarunanayake discloses an edge node that receives content from a Network Operations Center (NOC) via a satellite broadcast content distribution network and distributes it to a last mile service provider, the edge node comprising:

one media server capable of serving both live and non-live content [column 7 «lines

Art Unit: 2152

29-33»];

a private network that receives content from the satellite broadcast content distribution network and distributes it to the media server [column 7 «lines 34-40»: “Layer 2” is synonymous with data link layer protocol, such as VLAN];

a public network that transmits the received content from the server to a last mile service provider and having a terrestrial communication link to the NOC [Figure 2| Figure 3 «items 210, 204, 220, 226»];

where the media server is connected to both the public and private LANs [Figure 3 «item 222, 224, 226»]; and

where the media server, private network and public network exist in a single computer [Figure 3 «item 224»].

Rajakarunanayake does not expressly disclose a VLAN.

34> However, Rajakarunanayake does disclose utilizing layer 2 communications for the edge node. It is well known in the art that layer 2 corresponds to the data link layer within a network stack. Sistanizadeh discloses that a VLAN is layer 2 service [column 15 «lines 36-41»]. Thus, it would have been obvious to one of ordinary skill in the art to have reasonably inferred that Rajakarunanayake’s layer 2 connection would have been implemented as a VLAN, as is well known in the art.

35> As to claim 5, Rajakarunanayake discloses a terrestrial link providing a back channel to the NOC [Figure 3 «item 204»].

Art Unit: 2152

36> As to claim 7, Rajakarunanayake discloses streamed content [column 9 «lines 12-16»].

37> As to claim 11, Rajakarunanayake discloses shared storage connected to the satellite interface and the processor [column 7 «lines 9-33»].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Stevens et al, U.S Patent Publication No. 2002|0010641;

Barker et al, U.S Patent Publication No. 2001|0023429;

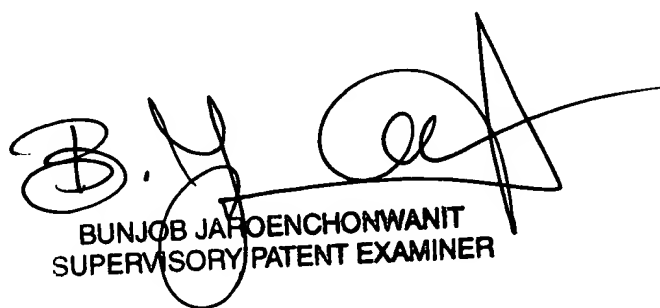
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is 571.272.3942. The examiner can normally be reached on Monday-Thursday [7:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2152

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DC



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SUPERVISORY PATENT EXAMINER